

## Pat nt Abstracts of Japan

PUBLICATION NUMBER : 60197669  
PUBLICATION DATE : 07-10-85

APPLICATION DATE : 16-03-84  
APPLICATION NUMBER : 59051884

APPLICANT : KURARAY CO LTD;

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INT.CL. : C07D311/72

TITLE : EXTRACTIVE SEPARATION OF TOCOPHEROL

ABSTRACT : PURPOSE: To obtain tocopherol under an extremely mild condition in high selectivity, by extracting a tocopherol-containing vegetable oil or fat with a CO<sub>2</sub>-containing extractant under specific condition, and carrying out the separation operation in two steps under specific condition.

CONSTITUTION: A tocopherol-containing vegetable oil or fat is made to contact with a CO<sub>2</sub>-containing extractant under subcritical condition of CO<sub>2</sub> (especially at a temperature lower than the critical temperature of CO<sub>2</sub> by 5~10°C), and the extracted mixture is heated at a temperature above the critical temperature of CO<sub>2</sub> and higher than the contact temperature by 5~30°C to effect the separation of the mixture into a tocopherol-containing component and a free acid-containing component. The extract component containing free acid is maintained under a pressure lower than the pressure of the former separation process by 0.5~5Mpa to effect the separation of the free acid. The recovered extractant is recycled and reused for the extraction of tocopherol.

EFFECT: An odorless oil and fat can be also produced.

USE: A substance effective for the remedy of sterility, and the prevention of abortion, premature labor, pregnancy disorder, etc.